

REMARKS

After the foregoing Amendment, Claims 1-20 are currently pending in this application. Claim 15 has been amended to correct a minor informality. In view of the following remarks, a reconsideration of the present patent application is respectfully requested.

Claim Rejections under 35 U.S.C. §103

Claims 1, 3-5 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bell (U.S. Patent No. 5,410,707) (hereinafter referred to as Reference 1) in view of Curran *et al.* (U.S. Patent No. 5,247,659) (hereinafter referred to as Reference 2). Applicants respectfully traverse this rejection.

The present invention is a method of using a memory card for booting a computer system. The card can be used to boot the computer when its BIOS is corrupted or missing, such as by physical damage or from a virus, or when no permanent BIOS is resident on the motherboard. The booting from the memory card may be password protected, and the operating system may also be stored on the memory card. The memory card is connected to the computer via a low pin count (LPC) or a PCI interface.

As described in its ABSTRACT, Reference 1 relates to a process for bootstrapping a computer system, wherein the remap (the content of Memory Card)

and the content of the keyboard memory would be copied to the main memory during the reset process. In contrast, the present application relates to a method for booting a computer system via a BIOS on a memory card when it is unable to boot the computer system via the BIOS on the motherboard. Therefore, the present application is distinguishable from Reference 1.

In Reference 2, the input process is used for checking the system configuration. In contrast, in the present application, it is after the system configuration check that the BIOS is fetched. Therefore, the present application is distinguishable from Reference 2. Furthermore, in Reference 2, while a dangerous configuration is checked out the main power is turned off. In contrast, in the present application, such as Paragraph [0034], when the computer is unable to boot using the BIOS memory of the computer system, the user can insert the IC memory card into the memory card reading device and press a specific key on a panel of the computer system to start a boot-up select. When the user presses a specific key, the boot-up select is transmitted to a control circuit within the inserted memory card. After the control circuit receives the boot-up select, the control circuit sends a disabled signal for disabling the BIOS memory of the computer system, and then reads the BIOS of the IC memory card for booting the computer system. Therefore, while the computer is unable to boot using the BIOS memory of the computer system, it is practicable to boot the computer system by the BIOS of the memory

card in the present application. In contrast, in Reference 2, the main power is turned off when a dangerous configuration is checked out.

Based on the arguments presented above, it can be seen that References 1 and 2 and the present application are directed to different fields of endeavor. Therefore, one skilled in the art would not look to these References to arrive at the method of booting the computer system recited in the present claim 1.

The present invention also has additional advantages over References 1 and 2. As described above, the present invention provides a method for booting the computer by the BIOS stored in the integrated circuit (IC) memory card. Therefore, the computer need not have an internal BIOS, and in this configuration, it is not necessary to devote motherboard space in the computer system for containing the BIOS memory. Further, unused capacity of the IC memory card can be used for storing other data. In addition, the present invention also provides a method for maintaining the security of the computer system and increasing the portability of the operating system (OS) by storing password and operating system in the IC memory card. The mentioned advantages of the present application are not possible using References 1 and 2, alone or in combination. Accordingly, the present invention is further distinguishable over References 1 and 2.

Based on the arguments presented above, claim 1 is believed to be patentable over References 1 and 2. Withdrawal of the 35 U.S.C. §103(a) rejection of claim 1 is

respectfully requested. Claims 2-8 depend from claim 1, and are also believed to be patentable. Withdrawal of the 35 U.S.C. §103(a) rejection of claims 2-8 is also respectfully requested.

Claims 9, 11 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bell (U.S. Patent No. 5,410,707) (same as above, hereinafter referred to as Reference 1) in view of Thompson et al. (U.S. Patent No. 6,725,382) (hereinafter referred to as Reference 3). Applicants respectfully traverse this rejection.

As described in Reference 3, such as Column 4, Line 47 to Column 5, Line 45 thereof, the user of the computer system is be prompted to enter a password at step 404. In contrast, as described in Paragraph [0018] of the present application, the user is not prompted to enter the password. Rather, the password is already stored in the memory card, without the user's current input. As recited in Claim 9 of the present application, "...providing a memory card having a second password and ...". Therefore, claim 9 is distinguishable from Reference 3.

Furthermore, References 1 and 3 and the present application are directed to different fields of endeavor, therefore one skilled in the art would not look to these References to arrive at the method of booting the computer system recited in the present claim 9. Furthermore, the advantages resulting from providing the method for booting the computer by the BIOS stored in the integrated circuit (IC) memory

card and the method for maintaining the security of the computer system and increasing the portability of the operating system (OS) by storing password and operating system in the IC memory card in the present application could not be gained by use of References 1 and 3, alone or in combination. Accordingly, claim 9 is distinguishable over References 1 and 3.

Based on the arguments presented above, claim 9 is believed to be patentable over References 1 and 3. Withdrawal of the 35 U.S.C. §103(a) rejection of claim 9 is respectfully requested. Claims 10-14 are dependent upon claim 9, and are also believed to be patentable. Withdrawal of the 35 U.S.C. §103(a) rejection of claims 10-14 is also respectfully requested

Claims 15, 17 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bell (U.S. Patent No. 5,410,707) (hereinafter referred to as Reference 1) in view of Park *et al.* (U.S. Patent Publication No. 2003/0145191) (hereinafter referred to as Reference 4). Applicants respectfully traverse this rejection.

In Reference 4, such as Paragraph [0025] thereof, system memory card 12 is employed as a portable flash memory rewritably storing data and detachably attached to the PCI interface 10, and can store information on a BIOS environment, an OS (operating system) environment, and/or a user's last application operation environment, which are typically stored in a memory, such as main memory 5 of the

computer system (Figure 2 of Reference 4) and collectively referred to as system environment 20. System memory card 12 is connected to the computer system through PCI interface 10, and stores data from and provides data to the computer system. In addition, such as Figure 4 and paragraphs [0032] to [0040] of Reference 4, at operation 52 after the BIOS booting, the BIOS reads the OS (operating system) onto the main memory 5 from the integrated hard disk (not shown) of the computer system, and performs OS booting on the basis of the OS environment stored in the system memory card 12, i.e. the OS of Reference 4 might be stored in the integrated hard disk. In contrast, as described in Claim 15 and paragraphs [0009], [0024] and [0038] to [0039] of the present application, the OS is stored in the memory card in the present invention. Claim 15 recites, "...providing a memory card having a basic input-output system and an operating system stored therein..." Furthermore, the advantages resulting from providing the method for booting the computer by the BIOS stored in the integrated circuit (IC) memory card and the method for maintaining the security of the computer system and increasing the portability of the operating system (OS) by storing password and operating system in the IC memory card in the present application could not be obtained by the cited References 1 and 4, alone or in combination. Accordingly, claim 9 is distinguishable over References 1 and 4.

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Based on the arguments presented above, claim 15 is believed to be patentable over References 1 and 4. Withdrawal of the 35 U.S.C. §103(a) rejection of claim 15 is respectfully requested. Claims 16-20 depend from claim 15, and are also believed to be patentable. Withdrawal of the 35 U.S.C. §103(a) rejection of claims 16-20 is also respectfully requested

Conclusion

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application, including claims 1 - 20, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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